

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant(s):	§	
Melody Vos and Jeff Slavin	§	Art Unit: 2175
	§	
Serial No.: 09/990,770	§	Examiner: Neveen Abel Jalil
	§	
Filed: November 21, 2001	§	Docket No.: 149-0046US
	§	
For: Database Management System	§	Customer No.: 29855
and Method which Monitors	§	
Action Results and Adjusts User	§	
Parameters In Response	§	

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Commissioner for Patents
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APPEAL BRIEF

This is an appeal from the rejection of claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 in the Final Office Action dated 09 August 2007.

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I. REAL PARTY IN INTEREST

The real party in interest in the above referenced patent application is BMC Software, Inc. of Houston, Texas.

II. RELATED APPEALS AND INTERFERENCES

To the present knowledge of Appellants' representative, there are currently no related appeal or interference proceedings that will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the present Appeal.

III. STATUS OF CLAIMS

Claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 are pending, and claims 5, 7, 11, 20, 22, 26, 35, 37, and 41 are cancelled. Claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 are rejected and are appealed.

IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to an automated database management method for a database comprising one or more database objects. The method includes associating management criteria with the database to manage database objects (Step 502-Fig. 5; page 21, ll. 13-16; and page 22, ll. 13-17), collecting statistics relating to operation of the database (*See* Step 852-Fig. 11 and page 29, ll. 12-13; *See also* steps 504 to 512-Fig. 5, 708-Fig. 7A, 802-Fig. 8, 812-Fig. 9, and 832-Fig. 10), and determining characteristics of the database objects based on the collected statistics (*See* Step 854-Fig. 11 and page 29, ll. 13-15; *See also* steps 512 to 514-Fig. 5, 804-Fig. 8, 814-Fig. 9, and 834-Fig. 10). Based on the management criteria and the determined characteristics of the database objects, the method includes determining actions to be performed on one or more database objects to modify the one or more database objects (*See* Step 856-Fig. 11 and page 29, ll. 15-17; *See also* steps 806-Fig. 8, 816-Fig. 9,

836-Fig. 10, 874-Fig. 12, and 892-Fig. 14), modifying the one or more database objects by performing the actions on the database objects (*See* Step 858-Fig. 11 and page 29, ll. 17-18; *See also* steps 810-Fig. 8, 820-Fig. 9, 840-Fig. 10, and 876-Fig. 12), and monitoring results of modifying the database objects (*See* Step 860-Fig. 11 and page 29, ll. 18-19; *See also* steps 824-Fig. 9 and 844-Fig. 10). Based on the results of modifying the database objects, the method includes reconfiguring the management criteria associated with the database (*See* Step 862-Fig. 11 and page 29, ll. 19-20).

Independent claim 16 is directed to a program storage device comprising program instructions stored thereon. The program instructions are computer-executable to cause a programmable control device to associate management criteria with a database to manage database objects of the database (Step 502-Fig. 5; page 21, ll. 13-16; and page 22, ll. 13-17), collect statistics relating to operation of the database (*See* Step 852-Fig. 11 and page 29, ll. 12-13; *See also* steps 504 to 512-Fig. 5, 708-Fig. 7A, 802-Fig. 8, 812-Fig. 9, and 832-Fig. 10), and determine characteristics of the database objects based on the collected statistics (*See* Step 854-Fig. 11 and page 29, ll. 13-15; *See also* steps 512 to 514-Fig. 5, 804-Fig. 8, 814-Fig. 9, and 834-Fig. 10). Based on the management criteria and the determined characteristics of the database objects, the program instructions cause the programmable control device to determine actions to be performed on one or more of the database objects to modify the one or more database objects (*See* Step 856-Fig. 11 and page 29, ll. 15-17; *See also* steps 806-Fig. 8, 816-Fig. 9, 836-Fig. 10, 874-Fig. 12, and 892-Fig. 14), modify the one or more database objects by performing the actions on the database objects (*See* Step 858-Fig. 11 and page 29, ll. 17-18; *See also* steps 810-Fig. 8, 820-Fig. 9, 840-Fig. 10, and 876-Fig. 12), and monitor results of modifying the database objects (*See* Step 860-Fig. 11 and page 29, ll. 18-19; *See also* steps 824-Fig. 9 and 844-Fig. 10). Based on the results of modifying the database objects, the program instructions cause the programmable control device to reconfigure the management criteria associated with the database (*See* Step 862-Fig. 11 and page 29, ll. 19-20).

Independent claim 31 is directed to a database management system. The system includes a CPU, a database coupled to the CPU, and a memory coupled to the

CPU. The database comprises one or more database objects, and the memory stores program instructions. The program instructions are executable by the CPU to associate management criteria with the database to manage database objects (Step 502-Fig. 5; page 21, ll. 13-16; and page 22, ll. 13-17), collect statistics relating to operation of the database (See Step 852-Fig. 11 and page 29, ll. 12-13; See also steps 504 to 512-Fig. 5, 708-Fig. 7A, 802-Fig. 8, 812-Fig. 9, and 832-Fig. 10), and determine characteristics of the database objects based on the collected statistics (See Step 854-Fig. 11 and page 29, ll. 13-15; See also steps 512 to 514-Fig. 5, 804-Fig. 8, 814-Fig. 9, and 834-Fig. 10). Based on the management criteria and the determined characteristics of the database objects, the program instructions are executable by the CPU to determine actions to be performed on the database objects to modify the database objects (See Step 856-Fig. 11 and page 29, ll. 15-17; See also steps 806-Fig. 8, 816-Fig. 9, 836-Fig. 10, 874-Fig. 12, and 892-Fig. 14), modify the database objects by performing the actions on the database objects (See Step 858-Fig. 11 and page 29, ll. 17-18; See also steps 810-Fig. 8, 820-Fig. 9, 840-Fig. 10, and 876-Fig. 12), and monitor results of modifying the database objects (See Step 860-Fig. 11 and page 29, ll. 18-19; See also steps 824-Fig. 9 and 844-Fig. 10). Based on the results of modifying the database objects, the program instructions are executable by the CPU to reconfigure the management criteria associated with the database (See Step 862-Fig. 11 and page 29, ll. 19-20).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 stand rejected under 35 U.S.C. § 102(a) as being anticipated by CHANG, Fangzhe et al., "Automatic Configuration and Run-Time Adaptation of Distributed Applications," IEEE 2000 ("Chang et al.").

VII. ARGUMENT

Claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 stand rejected under 35 U.S.C. § 102(a) as being anticipated by CHANG, Fangzhe et al., "Automatic Configuration and Run-Time Adaptation of Distributed Applications," IEEE 2000 ("Chang et al."). Assignee respectfully traverses the contention that Chang et al. anticipates the listed claims because Chang et al. does not teach or suggest each claimed element called for in independent claims 1, 16, and 31.

A. Legal Principles

"For a prior art reference to anticipate in terms of 35 U.S.C. 102, every element of the claimed invention must be identically shown in a single reference." *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988). Furthermore, the "identical invention must be shown in as complete detail as is contained in the patent claim" (*Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989), *cert. denied*, 493 U.S. 853 (1989)), and the "elements must be arranged as in the claim under review" (*In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir. 1990)). See also M.P.E.P. 2131. In accordance with established law, for Chang et al. to anticipate Assignee's claims, Chang et al. must disclose each element contained in the claims, and there must be no difference between the claimed invention and the disclosure of Chang et al.

B. Assignee's claims

Each of Assignee's claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 is directed to automated database management. Management criteria (e.g., one or more policies¹ or definitions²) are associated with a **database** to manage **database**

¹ Policies associated with a database are defined as rules that may govern how database objects and actions are managed by components, and the policies may instruct what actions are to be performed and when and how to perform those actions. See e.g., page 22, ll. 13-17.

² Definitions associated with a database are defined as a set of rules which, when applied to a database catalog, produces a list of database objects. See e.g., page 21, ll. 13-14.

objects³, and statistics relating to operation of the database are collected. Based on the collected statistics, **characteristics of the database objects** are determined. Based on the management criteria and the determined characteristics of the database objects, **actions**⁴ **to be performed on one or more database objects are determined to modify the one or more database objects**. These **determined actions are performed on the database objects to modify them**, and the results are monitored. Based on the results, the management criteria are reconfigured. See e.g., independent claims 1, 16, and 31.

C. Discussion

In contrast to Assignee's claims, Chang et al. is directed to the automatic configuration and run-time adaptation of a distributed application. Thus, the Examiner's attempt to apply particular portions of Chang et al.'s disclosure against elements of Assignee's claims fails because Chang et al. is directed to an application and its configuration, whereas Assignee's claims are directed to a database having database objects and management of the database. Despite the fundamental differences between Assignee's claims and the disclosure of Chang et al., the Examiner, by citing particular portions of Chang et al., attempts to show that Chang et al. discloses each element of Assignee's claims. As Assignee points out below, however, Chang et al. fails to disclose the claimed elements they are purported to provide against Assignee's claims.

First, the Examiner contends that Chang et al. discloses associating management criteria with a database to manage database objects at page 13, ¶ 3-6. (Final Office Action at pg. 2). This is an incorrect characterization of Chang et al.

³ Database objects can be data stored in a database of a storage device or file server (224). See page 12, ll. 10-13.

⁴ Actions to modify database objects can be actions to correct performance of the database management system, to prevent new or associated problems, to spread data across existing data sets, to create a new data set, to relocate specific datasets, to allocate free space by a REORG utility, to reduce frequent reorganization of database objects, to turn off compression, to apply compression, or to determine the most effective compression algorithm for specific objects. See page 16, ll. 13-17; page 18, ll. 1-3; page 24, line 25 to page 25, line 7; page 25, ll. 9-16; page 25, ll. 18-27; and page 26, ll. 1-9.

Clearly, Chang et al. is directed to a “distributed application” and discusses forms of information for a tunability interface to tune such a distributed application. See Chang et al. at pages 14 and 15, ¶ 2. Thus, in Chang et al., there is no disclosure of database objects (or any equivalent entity) or associated management criteria with a database to manage database objects.

In response to Assignee’s previous arguments, the Examiner contends that “[m]anagement criteria according to Applicant’s disclosure are related to identical conditions that cause performance or availability problems in data base object But not in fact claimed as any specific criteria.” (Final Office Action page 7). More correctly and as specifically claimed, the claimed management criteria in Assignee’s claims associated with a **database** is used “to manage **database objects**.” See claims 1, 16, and 31. In Chang et al., however, resource characteristics (e.g., CPU load and network bandwidth) of interest to an application are monitored and an appropriate configuration of that application is chosen to automatically adapt the application at run time to changes in CPU load and network bandwidth. See Chang et al. at page 12, ¶ 3 and page 16, ¶ 4. Chang et al. say nothing about management criteria associated with a database and used to manage database objects of that database.

Second, the Examiner contends that Chang et al. discloses collecting statistics relating to operation of a database at page 14 and at page 15, ¶ 2 and determining characteristics of the database objects based on the collected statistics at page 16, ¶ 4 and page 17, ¶ 1-3. (Final Office Action at pg. 2). The Examiner has incorrectly characterized Chang et al. In particular, Chang et al. discloses a monitoring agent specific to an application that monitors resources of interest to the application (e.g., CPU load and network bandwidth) and the progress of the application. A resource scheduler in Chang et al. correlates the observed resource characteristics of the application to models stored in a performance database, which is not disclosed as being monitored and which is not disclosed as having statistics collected with respect to its operation. Then, a steering agent in Chang et al. reconfigures the application by listening to control messages and changing the configuration of the application. See Chang et al. at page 16, ¶ 4 and page 17, ¶ 1-3. Thus, Chang et al. fundamentally

focuses on an application and determines resource characteristics of interest to that application so the configuration of the application can be switched. Accordingly, Chang et al. fails to disclose or fairly suggest collecting statistics relating to the operation of a database and determining characteristics of database objects based on such collected statistics.

Third, the Examiner contends that Chang et al. discloses determining actions to be performed on one or more database objects to modify the database objects based on management criteria and determined characteristics of the database objects at page 12, ¶ 1 and that Chang et al. discloses modifying one or more database objects by performing actions on the database objects at page 12, ¶ 3. (Final Office Action at pg. 3). As noted previously, Chang et al. focuses on an application, monitors resources of interest for the application, and switches the configuration of the application. The disclosure of Chang et al. at page 12, ¶ 1 and ¶ 3 merely confirms that the disclosure is directed to modifying the configuration of an application and not modifying database objects of a database.

Fourth, the Examiner contends that Chang et al. discloses monitoring results of modifying the database objects at page 12, ¶ 2. (Office Action at page 3). Fundamentally, Chang et al. merely discloses at page 12, ¶ 2 continuously monitoring and controlling application requests for system resources. Thus, Chang et al. does not even fairly suggest monitoring results of modifying database objects based on actions determined from collected statistics. Besides, any monitoring disclosed at page 12, ¶ 2 in Chang et al. does not relate to the later described (and later occurring) automatic adaptation of an application disclosed in Chang et al. at run-time based on changes in CPU load and network bandwidth at page 12, ¶ 3. Thus, the Examiner's premise in the argument is not even supported by how Chang et al. describes his framework.

Fifth, the Examiner contends that Chang et al. discloses reconfiguring the management criteria associated with the database based on the results of modifying the database objects at page 12 ¶ 8. (Office Action at page 3). This is incorrect for the fundamental reason that Chang et al.'s disclosure is directed to an application and is not directed to a database as noted previously. Chang et al. at page 12, ¶ 8 further

solidifies this fundamental distinction between Assignee's claims and Chang et al.'s disclosure. Beginning at page 12, ¶ 8, for example, Chang et al. discloses the structuring of the application related to the run-time adaptation system discussed. As explicitly discussed in Chang et al., the application requires a way to execute under alternate configurations. Thus, Chang et al. does not even fairly suggest **reconfiguring any criteria used to manage database objects of a database after monitoring results of modifying those database objects with actions determined from collected statistics**. Chang et al. merely suggests executing an application under an alternate configuration.

In summary, Assignee's claims call for associating management criteria with a database to manage database objects (Chang et al. discloses forms of information for an interface to a distributed application); and Assignee's claims call for collecting statistics relating to operation of a database and determining characteristics of database objects based on collected statistics (Chang et al. discloses a monitoring agent specific to an application that monitors resources of interest to the application and the progress of the application). In addition, Assignee's claims call for determining actions to be performed on database objects based on the management criteria and the determined characteristics and modifying the database objects by performing the actions (Chang et al. discloses switching the configuration of resources of interest for a distributed application). Furthermore, Assignee's claims call for monitoring results of modifying the database objects (Chang et al. discloses monitoring and controlling application requests for system resources); and Assignee's claims call for reconfiguring the management criteria associated with the database based on the results of modifying the database objects (Chang et al. discloses executing an application under an alternate configuration). Consequently, Chang et al. fails to teach or fairly suggest each claimed element in as complete detail contained in Assignee's independent claims 1, 16, and 31.

In addition to relying on Chang et al., the Examiner cites to paragraphs of Assignee's disclosure in an attempt to argue that the claimed invention actually relates to an application, collects statistics of such an application, has objectives related to the

application, and gathers the same performance statistics of an application as gathered by Change et al. This form of argumentation is improper because the claims of a pending application are not to be interpreted in light of the specification. See MPEP 2111.01, citing *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004). In fact, the Examiner has actually cited portions of Assignee's disclosure identified as prior art (i.e., ¶ [0047] of the published application), which further evidences the improper nature of the Examiner's argumentation.

The Examiner also states that the "Examiner is broadly interpreting the recitation of 'server' application storing large images in Change et al. page 12, ¶ 5, [to] be 'database' and 'the large images'...to be 'database objects.'" (Final Office Action at page 5). This statement shows that the Examiner is improperly reading subject matter into the disclosure of Change et al. that is not actually disclosed or even suggested in Change et al. Change et al. does not suggest that the disclosed active visualization application is a "database" nor that the "large images" are "database objects." Moreover, the Examiner is required to interpret the terms "database" and "database object" in Assignee's claims with the broadest reasonable interpretation consistent with the interpretation that those skilled in the art would reach. See MPEP 2111, citing *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). The Examiner fails to show why a person skilled in the art would reasonably interpret Change et al.'s "active visualization application" at page 12 ¶ 5 to be consistent with Assignee's "database", and Chang et al.'s "large images" at page 12 ¶ 5 to be consistent with Assignee's "database objects."

Finally, the Examiner appears to argue in the Final Office Action that the Assignee has acknowledged various interpretations of Chang et al. previously presented by the Examiner. For example, the Examiner cites to pages 11 and 12 of Assignee's previous response of 22-May-2007 as supporting his interpretation of Chang et al. when responding to Assignee's arguments. (See Final Office Action at page 7, lines 12-15; page 8, lines 3-5 and 10-13). As evidenced above, however, Assignee fundamentally disagrees with the Examiner's characterization of Chang et al. and how

Chang et al.'s disclosure relates to Assignee's claims. Accordingly, Assignee disagrees that any statements made in previous responses supports the Examiner's arguments.

For at least the above reasons, Chang et al. does not anticipate Assignee's independent claims 1, 16, and 31, and Assignee respectfully requests the Board to reverse the rejection of all pending claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45 under 35 U.S.C. § 102(a) to Chang et al.

D. Conclusion

The Examiner's rejection uses selective portions and language from Chang et al. and attempts to suggest from those selective portions that Chang et al. discloses the limitations of Assignee's claims. As evidenced above, however, the contrast between Assignee's claims and what is actually disclosed in Chang et al. shows that Chang et al. fails to disclose or even suggest the limitations of Assignee's claims. For at least these reasons, Chang et al. cannot anticipate Assignee's claims. Consequently, Assignee respectfully requests that the Board grant Assignee's appeal by reversing the rejection of claims 1-4, 6, 8-10, 12-19, 21, 23-25, 27-34, 36, 38-40, and 42-45.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) An automated database management method for a database comprising one or more database objects, the method comprising:
 - associating management criteria with the database to manage database objects;
 - collecting statistics relating to operation of the database;
 - determining characteristics of the database objects based on the collected statistics;
 - determining actions to be performed on one or more database objects to modify the one or more database objects based on the management criteria and the determined characteristics of the database objects;
 - modifying the one or more database objects by performing the actions on the database objects;
 - monitoring results of modifying the database objects; and
 - reconfiguring the management criteria associated with the database based on the results of modifying the database objects.
2. (Previously Presented) The database management method of claim 1, further comprising:
 - automatically determining a schedule to perform the actions on the database objects,
 - wherein the performing the actions on the database objects comprises performing the actions on the database objects based on the schedule.
3. (Original) The database management method of claim 2, wherein the performing the actions on the database objects based on the schedule comprises automatically performing the actions on the database objects based on the schedule.
4. (Original) The database management method of claim 1, further comprising:
 - confirming the performing the actions on the database objects.

5. (Cancelled)

6. (Previously Presented) The database management method of claim 1, wherein the determining the characteristics of the database objects comprises automatically determining the characteristics of the database objects.

7. (Cancelled)

8. (Previously Presented) The database management method of claim 1, wherein the determining the actions to be performed on the database objects based on the characteristics of the database objects comprises automatically determining the actions to be performed on the database objects based on the characteristics of the database objects.

9. (Previously Presented) The database management method of claim 1, wherein the statistics comprise object-level statistics.

10. (Previously Presented) The database management method of claim 1, wherein the statistics comprise activity-level statistics.

11. (Cancelled)

12. (Previously Presented) The database management method of claim 1, wherein the determining the characteristics of the database objects comprises determining the characteristics of the database objects using one or more policies in the management criteria.

13. (Previously Presented) The database management method of claim 1, wherein the determining the characteristics of the database objects comprises determining the characteristics of the database objects using one or more definitions in the management criteria.

14. (Previously Presented) The database management method of claim 1, further comprising:

customizing one or more definitions in the management criteria.

15. (Previously Presented) The database management method of claim 1, further comprising: customizing one or more policies in the management criteria.

16. (Previously Presented) A program storage device comprising program instructions stored thereon, wherein the program instructions are computer-executable to cause a programmable control device to implement:

associating management criteria with a database to manage database objects of the database;

collecting statistics relating to operation of the database;

determining characteristics of the database objects based on the collected statistics;

determining actions to be performed on one or more of the database objects to modify the one or more database objects based on the management criteria and the determined characteristics of the database objects;

modifying the one or more database objects by performing the actions on the database objects;

monitoring results of modifying the database objects; and

reconfiguring the management criteria associated with the database based on the results of modifying the database objects.

17. (Previously Presented) The program storage device of claim 16, wherein the program instructions are further computer-executable to implement:

automatically determining a schedule to perform the actions on the database objects,

wherein the performing the actions on the database objects comprises performing the actions on the database objects based on the schedule.

18. (Previously Presented) The program storage device of claim 17, wherein the performing the actions on the database objects based on the schedule comprises automatically performing the actions on the database objects based on the schedule.

19. (Previously Presented) The program storage device of claim 16, wherein the program instructions are further computer-executable to implement:

confirming the performing the actions on the database objects.

20. (Cancelled)

21. (Previously Presented) The program storage device of claim 16, wherein the determining the characteristics of the database objects comprises automatically determining the characteristics of the database objects.

22. (Cancelled)

23. (Previously Presented) The program storage device of claim 16, wherein the determining the actions to be performed on the database objects based on the characteristics of the database objects comprises automatically determining the actions to be performed on the database objects based on the characteristics of the database objects.

24. (Previously Presented) The program storage device of claim 16, wherein the statistics comprise object-level statistics.
25. (Previously Presented) The program storage device of claim 16, wherein the statistics comprise activity-level statistics.
26. (Cancelled)
27. (Previously Presented) The program storage device of claim 16, wherein the determining the characteristics of the database objects comprises determining the characteristics of the database objects using one or more policies in the management criteria.
28. (Previously Presented) The program storage device of claim 16, wherein the determining the characteristics of the database objects comprises determining the characteristics of the database objects using one or more definitions in the management criteria.
29. (Previously Presented) The program storage device of claim 16, wherein the program instructions are further computer-executable to implement:
customizing one or more definitions in the management criteria.
30. (Previously Presented) The program storage device of claim 16, wherein the program instructions are further computer-executable to implement: customizing one or more policies in the management criteria.

31. (Previously Presented) A database management system comprising:
- a CPU;
 - a database coupled to the CPU, wherein the database comprises one or more database objects; and
 - a memory coupled to the CPU, wherein the memory stores program instructions which are executable by the CPU to:
 - associate management criteria with the database to manage database objects;
 - collect statistics relating to operation of the database;
 - determine characteristics of the database objects based on the collected statistics;
 - determine actions to be performed on the database objects to modify the database objects based on the management criteria and the determined characteristics of the database objects;
 - modify the database objects by performing the actions on the database objects;
 - monitor results of modifying the database objects; and
 - reconfigure the management criteria associated with the database based on the results of modifying the database objects.
32. (Previously Presented) The database management system of claim 31, wherein the program instructions are further executable by the CPU to:
- automatically determine a schedule to perform the actions on the database objects,
 - wherein in performing the actions on the database objects, the program instructions are further executable by the CPU to perform the actions on the database objects based on the schedule.

33. (Original) The database management system of claim 32, wherein in performing the actions on the database objects based on the schedule, the program instructions are further executable by the CPU to automatically perform the actions on the database objects based on the schedule.

34. (Original) The database management system of claim 31, wherein the program instructions are further executable by the CPU to:
confirm the performing the actions on the database objects.

35. (Cancelled)

36. (Previously Presented) The database management system of claim 31, wherein in determining the characteristics of the database objects, the program instructions are further executable by the CPU to automatically determine the characteristics of the database objects.

37. (Cancelled)

38. (Previously Presented) The database management system of claim 31, wherein in determining the actions to be performed on the database objects based on the characteristics of the database objects, the program instructions are further executable by the CPU to automatically determine the actions to be performed on the database objects based on the characteristics of the database objects.

39. (Previously Presented) The database management system of claim 31, wherein the statistics comprise object-level statistics.

40. (Previously Presented) The database management system of claim 31, wherein the statistics comprise activity-level statistics.

41. (Cancelled)

42. (Previously Presented) The database management system of claim 31, wherein in determining the characteristics of the database objects, the program instructions are further executable by the CPU to determine the characteristics of the database objects using one or more policies in the management criteria.

43. (Previously Presented) The database management system of claim 31, wherein in determining the characteristics of the database objects, the program instructions are further executable by the CPU to determine the characteristics of the database objects using one or more definitions in the management criteria.

44. (Previously Presented) The database management system of claim 31, wherein the program instructions are further executable by the CPU to:
customize one or more definitions in the management criteria.

45. (Previously Presented) The database management system of claim 31, wherein the program instructions are further executable by the CPU to: customize one or more policies in the management criteria.

EVIDENCE APPENDIX

There is no evidenced submitted pursuant to §§ 1.130, 1.131, or 1.132.
Accordingly, this appendix is intentionally empty.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings. Accordingly, this appendix is intentionally empty.